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ABSTRACT

A year-long study of 28 third-grade teachers yielded extensive data describing their classroom management practices. The seven most effective and the seven least effective teachers were compared to determine what dimensions of mangement discriminated between them. Teachers who qualified as "better managers" had a firm preconceived notion of acceptable student behaviors and fashioned their classroom structures in such a way as to actively discourage intolerable behaviors. They also exhibited superb task analysis and an expertise in coordinating teacher and student activities in the most efficient manner. The "less effective" managers appeared to suffer from the lack of a clear set of expectation regarding student behavior and student work level. They considered student activity primarily on the basis of discouraging refractory deportment and did not display an adequately aggressive disposition towards positive student involvement. Although analysis is incomplete, some working hypotheses about the differences between the two types of teacher-managers are presented. (LH)

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Dimensions in Classroom Management Derived from Recent Research

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Footnote

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Abstract

A year-long study of 28 third-grade teachers yielded extensive and rich narrative data describing their management practices from the beginning of the year. The seven most effective and seven least effective teachers were compared to determine what dimensions of management discriminated between them. Analyses are still in progress, and this paper presents some working hypotheses about the differences between the two groups of teachers. Teacher behaviors are examined for the information that was conveyed to students about the purposes of cooperative behavior and how to behave in the classroom. In addition, the teachers' skills at diagnosing students' needs for information and immediate concerns are discussed. The latter is related to the teachers' abilities to manipulate the "signal systems" of activities and maintain the students' attention.

Dimensions of Classroom Management Derived from Recent Research

This paper presents some results from a large study of classroom management in third-grade classrooms. Data are still being analyzed; therefore, this report is limited to several working hypotheses about ways that more and less effective managers differ. This paper was the basis of an oral presentation; a detailed paper is in progress which will more systematically incorporate observational data.

The Classroom Organization Study was conducted by the Research and Development Center for Teacher Education during the school year 1977-78. The purpose of the study was to gather extensive information about how third-grade teachers in low-SES schools organized their classes at the beginning of the year and how subsequent management was affected. The background and methodology of the study are given in Evertson and Anderson (Note 1). Impetus for the study was provided by the local school district administrators, who asked the researchers to gather information about management practices in low-SES elementary schools, with the ultimate objective being use of the information in in-service and pre-service programs.

Because of this practical objective, most of the data collected in the study were descriptive and narrative, in order to provide specific examples of more and less effective strategies. However, quantitative data were also collected about rates of student on-task behavior in order to verify subjective impressions.

The observers were trained to focus on certain common activities and behaviors that we expected to be pertinent to classroom management

(observer guidelines and training are described in Evertson and Anderson, Note 1). However, the researchers did not know in advance what larger categories or global dimensions of behavior would be useful in analyzing the descriptions. Although there has been much useful work done on management, most of it is descriptive of what good managers are doing once the school year is established. For example, we expected to find that better managers would be "withit," would maintain momentum in lessons, would carefully monitor student behavior, would have lower rates of student misbehavior and higher rates of student engagement on academic work, and would have more efficient transitions and time use in general. In a sense, these characteristics, described by Kounin (1970), Brophy and Evertson (1976), and others, are the effects of the establishment of an efficient management system. They did not inform us about how teachers could reach that point, or why certain kinds of strategies might be most effective. Therefore, the data gathered about the beginning of the school year and subsequent management practices were not coded into preconceived categories of teacher behavior, because we were not sure what categories would be most important to describe the causes and mediators of effective management.

Because the data were descriptive and narrative, the data analysis activities have been largely inductive. The authors read narratives of the 27 teachers (no small feat, in that each teacher's file includes about 200 pages describing at least 40 hours of observation.) After initial reading and discussion, agreement was reached about some ways that the teachers' management could be described and summarized. We began to digest the descriptions by rating and summarizing the teachers on several dimensions that implied effectiveness of management. These "reader ratings" were used along with other information to form a composite criterion measure of

managerial effectiveness. After classifying teachers into groups that differed in effectiveness, we reread the descriptions, and, in conjunction with other data analyses, have begun to refine our understandings of how management systems were established and maintained. Although that activity is still in progress, several ideas are presented here that we expect to be useful in analyzing differences between more and less effective managers.

First, however, our criteria of "good management" should be spelled out more clearly. We conceived of "management activities" as anything that the teacher did to organize students, space, time, and materials so that instruction in content and student learning activities could take place. Therefore, management was considered to encompass much more than discipline and enforcement of rules about noise and movement, although these tasks may be considered as part of overall management.

One goal of the study was to identify management practices that maximized the the time that students spend actively engaged in learning activities (e.g., receiving instruction, completing written assignments, reading, doing projects.) We were committed to this goal because of an interest in increasing academic achievement in the basic skills. Much other research has demonstrated links between the amount of time that students spend actively engaged with academic content and the amount of achievement in that content area (e.g., Rosenshine & Berliner, 1978; Wiley & Harnischeger, 1974; Fisher, Filby, Marliave, Cahen, Dishaw, Moore, & Berliner, Note 2). Other research had also suggested that teachers who were better classroom managers were able to maximize this engaged time. For example, these are some specific correlates of achievement that can be interpreted as management functions and outcomes that may contribute to higher engagement: shorter, more efficient transitions, fewer student

misbehaviors, more use of routines and procedures to handle daily business, and arranging for sufficient appropriate work with minimal time when students are unoccupied (Anderson, Evertson, & Brophy, 1979; Brophy & Evertson, 1976; Brophy & Putnam, 1979; McDonald & Elias, Note 3; Stallings & Kaskowitz, Note 4).

Therefore, our criteria for "good management" were a high degree of apparent on-task involvement by the students with a minimum of misbehavior, and efficient use of class time devoted to academic activities. We classified teachers as "better managers" when: 1) they demonstrated leadership in controlling students' behavior, taking responsibility for students' engagement in learning activities and clearly instilling and enforcing expectations for such behavior; and 2) their management strategies reflected instructional leadership in that they scheduled most of the school day for productive work, they provided adequate, involving work for the students to do, and they made sure that learning was taking place.

There are many possible ways of describing classroom management, but no single conceptual scheme or set of dimensions can adequately account for all aspects of management. Therefore, the following ideas are not presented as a unified theory or model, but instead as one framework that may help practitioners think about and make decisions about management. Basically, management strategies are discussed in terms of the information that is conveyed to the students about why they should cooperate and stay on-task, and how they should do so.

For many years, practitioner wisdom has emphasized the importance of "teacher credibility." Experienced teachers know that students do not take all teacher statements at face value, and that "actions often speak louder

than words." This assumes that what a student understands about a teacher's meaning may be different and more important than the teacher's intention.

Therefore, it seems useful to look at teachers' management behaviors in terms of what they are likely to mean to the students--what information is conveyed about the way the classroom operates. What the teacher says, and fails to say, and what the teacher does, and fails to do, all inform students about what behaviors are expected, what will be tolerated, and what will be rewarded and punished.

This point of view assumes that the student is the critical mediator of the teacher's management strategies: if students (both individually and as a group) do not understand and/or accept the teacher's version of desired behaviors, then the management system does not accomplish its objectives of creating those behaviors. Therefore, what may be most important about what teachers do to manage their classrooms is what the students accept and understand.

At this point, with this set of data, we must make some assumptions about what the students understand and how they perceive the teacher's management strategies. We do not have direct information about student perceptions. However, we do have data on student behavior, and we are assuming that a generally high level of cooperative, on-task behavior reflects student acceptance and knowledge of the teacher's behavior standards. We are assuming that a teacher whose students demonstrate "good behavior" and higher rates of on-task involvement has succeeded in establishing the reputation as a credible leader of the class. We are also assuming that he or she achieved this state by several behaviors that communicated to the students why and how they should behave in desired

ways. Therefore, we are examining teachers' managerial behaviors for the quality of information conveyed to the students about desired behavior.

Obviously, student influence on the teacher and on classroom processes can not be ignored. Students enter a new classroom with some knowledge of what to expect, and they often enter with very different objectives than the teacher (Doyle, 1979). Admittedly, some groups of students are easier or more difficult to manage than others. Home and school factors outside her control still affect a teacher's job. However, it is important to remember that, in spite of all of the other influences on students' behavior, the individual teacher can make a tremendous difference. As one example, consider the teachers in the present study. Of the 14 teachers identified for intensive analysis because of their very high or very low ratings on managerial effectiveness, there are six pairs within same schools who are rated at opposite extremes. That is, the teachers in a pair can be contrasted as being very high or very low in effectiveness, but they were working in the same schools with similar students. Therefore, we believe that the student influence, although admittedly important, is not the primary determinant of the effectiveness of a teacher's management system. However, as will be pointed out below, the more successful managers seemed to be very sensitive to what their students were learning about the way the classroom would run and their roles in it.

Below are presented three clusters of teacher behaviors that have implications for the quality and quantity of information provided to students:

1. Teacher behaviors that may convey purposefulness and meaningfulness of academic activities (i.e., the students are informed about <u>why</u> on-task behaviors are important).

2. Teacher behaviors that instruct students in the skills of good behavior (i.e., the students are informed about how to behave).

3. Teacher behaviors that imply a sense of students' level of understanding and need for information and teacher selection of activities that reflect this.

Teacher Behaviors That May Convey Purposefulness

Teachers who were better managers demonstrated many behaviors that probably were conveying purposefulness and seriousness about school learning to the students. In so doing, they were providing a rationale for expected performance--telling the students why it was important that they cooperate and stay involved in school tasks. In contrast, teachers who were less good managers often behaved in ways that may have communicated a lack of clear purpose and a feeling that "going through the motions" was adequate, that filling in the time with acceptable activities was the most important objective each day.

Many of these behaviors may seem more "instructional" than "managerial," but they are included here because they required decisions by the teacher about classroom routines and allocation of time.

Some of the behaviors in this realm demonstrated by the more effective managers were:

---Students were held accountable for completing work within the time allotted. In order to insure this, the teachers frequently reminded the students about the time, and helped them learn to use the clock to pace their work. When a student's work was not completed within the allotted time, he or she generally finished it after school or during a "free time."

(The teachers were not inflexible, of course, and made other arrangements when the student's failure was reasonable.)

---The teachers scheduled regular times each day for themselves to review the work of the preceding period (such as the morning seatwork and reading group time). In this way, they quickly determined if anyone was having difficulty completing the work, and offered assistance as soon as possible.

---The teachers also regularly and systematically circulated through the room during seatwork periods, so that each student was checked frequently.

---Another way in which teachers held students accountable was by requiring participation by all students in group activities. This meant requiring attention as well as participation. One teachnique used frequently was patterned turns, (i.e., insuring that everyone had equal and predictable opportunities to respond) although this was not used in all contexts.

---There were regular procedures for turning in completed work and noting student progress.

---Another way in which teachers probably communicated seriousness about school tasks was by systematically providing feedback to the students about how well they had done. The students were accountable for doing their work, but the teacher also held herself or himself accountable for quickly returning it to them. In order to accomplish this, various systems were established. One teacher set up mailboxes for each student, and they knew to check them each afternoon. Another teacher established the first 15 minutes of the morning for the return of the previous day's papers.

When students had made errors, they were to correct them and then file them in a designated box. The teacher would check the box during the day.

---Many of the teachers who set aside time each morning to review the work also used that time to provide immediate feedback to students who needed it.

---In general, most contacts about work by the more effective managers were task-oriented; it seemed apparent that the teacher's concern was that the student learn the content, not simply that he or she be still and quiet and finish the work.

---The better managers' use of time demonstrated a concern with the importance of instruction. Time spent in necessary procedural matters (lunch money, roll call) was minimized; often, teachers performed such duties while the students were occupied with a task. Materials and supplies were ready in advance of activities, and the teacher spent most of the school day in actual instruction, except for the times required to review student progress to determine the need for feedback.

---The teacher projected a positive attitude about the work, suggestive of its importance. For example, work that was done well was regularly displayed, with the desirable qualities often highlighted in some way. Again, such behaviors may seem more instructional than managerial, but they required planning by the teacher for use of classroom space, preparation and changing of bulletin boards, etc.

In summary, the better managers established classrooms with routines and procedures that insured that instruction and learning took top priority, and that the students were informed about their responsibilities for performing the work, as well as about the importance of the work to the teacher. This does not mean that the better managers were stern

task-masters who ruled by the clock. Instead, their classrooms were very congenial and pleasant, but definitely oriented toward learning academic content.

Such teacher behaviors, performed consistently from the very beginning of the year, may have informed the students that there were reasons for cooperating with the teacher and behaving well--perhaps because it was the means to the larger goal of learning the content. Obviously, other factors are involved than the recognition that "Teacher means business," but this was one area where the differences between the better and poorer managers were quite apparent.

For example, the less successful managers, in contrast, behaved in these ways that may have communicated a very different attitude:

---There was less sense of student accountability. Frequently at the end of an allotted work time, the teacher would say, "Who needs more time?" Even when many of the students had been wasting time or socializing, the teacher provided more time to finish.

---Often there was not a set routine for turning in papers, and confusion existed during some transitions about what was to be done with completed work.

---Discussions frequently were conducted without many students participating. The most frequent methods of selecting students to answer were allowing them to call out and relying on volunteers, so that only the most eager students responded.

---Likewise, circulation among students working at their seats was often unsystematic, with the teacher responding to those students who attracted his/her attention, and often missing more reticient students or students who may have avoided him or her.

---There was little evidence of systematic efforts to provide feedback on completed work or on good behavior. Occasionally papers were returned during observation, but seldom were students given specific instructions to pay attention to them or to correct errors that they may have made. Systems to reward good behavior (such as tokens) were not used consistently.

---Time seemed to be a gap to be filled, not a resource to be used. Ways that the teachers' behaviors may have communicated this were spending longer than necessary on routines like PTA form collection, leaving groups of children without adequate work to do for long periods, and spending class time preparing materials for the next activity. In many classes, transitions between activities took up a substantial portion of the time devoted to the activity, and the teacher did not indicate displeasure at this. In fact, many of the less effective managers let the students control the pacing of the transition. The teacher did not attempt to get their attention and begin the next lesson until all students had moved into position, despite many of the students wasting time or seeing to personal needs at inappropriate times. (Similar findings about transitions are reported by Arlin, 1979.)

---Many teacher statements implied that the most important thing about the schoolwork was that the students would be quiet and still if they were doing it. That is, the teacher's priorities seemed to lie more in the behavior that accompanied work than in the learning. The work was often presented as disagreeable, or even as a punishment, although this was not true of all of the less effective managers.

---Although good work was sometimes displayed or good behavior rewarded, this was not always done so that many students were aware of it or understood why it was good.

In summary, the less effective managers behaved in ways that may have communicated that actual learning performance was not the most important goal of the class; instead, minimizing noise and activity and filling up the time with assignments seemed more important. The students did not receive regular feedback on how well they did on assignments, although they were expected to complete them. Since appropriate (i.e., in this case, calm) behavior, in and of itself, is not likely to be a satisfying goal for most young students, this purpose, if communicated, is not likely to inspire the behaviors desired by the teacher.

In many cases, it is likely that the less effective managers were indeed concerned about how their students were learning. However, they had not organized the day's time and activities so that their concern was communicated. The observations indicate, in fact, that the students may have had a very different picture. That is, the information they received about the goals of the classroom--why good behavior was desirable--did not emphasize the importance of learning the academic content.

Teacher Behaviors that Teach Students How to Behave Appropriately

A second kind of information that students appear to need (i.e., they were better behaved--more involved with tasks--when they had apparently received it) is how to perform expected behaviors. This was recognized by teachers who instructed the students in good behavior and in "going to school skills." Several teacher behaviors suggested to us that the better managers viewed cooperative behavior as a set of skills that had to be taught to the students, either by instructing them in sequential procedures

or by calling their attention to the critical aspects of a simple behavior. The less effective managers, on the other hand, either expected their students to know how to behave well (i.e., they did not highlight the specific and relevant aspects of "good behavior" or made statements implying that the students could behave well if they simply decided to) or they offered inadequate instruction in how to behave.

The better managers may be characterized in these ways:

---They knew what student behaviors were desired and what would not be tolerated. Their expectations were very clear and expressed in behavioral terms. These reflected a superb task analysis, resulting in both a collection of subskills necessary to perform the total behavior, but also an understanding of what it would take to coordinate the separate subskills. There was a focus on what students should be doing, as well as on what they should not be doing. For example, the beginning of school was characterized as a time to learn classroom rules and procedures, and the better managers deliberately planned time to practice and review the behaviors involved. Specifics included everything from how to sit on the rug in large group meetings (i.e., around the edge, with some space around each child), to how to go to the bathroom (i.e., when it was appropriate to go without permission, how to knock, how to respond when someone knocked, and remembering to flush and throw away paper towels).

---The better managers' abilities in these areas extended beyond the "good behaviors" that were necessary to maintain acceptable levels of order and quiet, and also included skills more closely related to performing school work. For example, teachers did not assume that students knew how to follow instructions for a workbook exercise, or how to take an assignment off the board and find the problems in the book. Instead, they

determined if the students had these skills, and if not, they taught them. Another example of such skills is learning to use a programmed reading series (how to interpret the symbols, knowing when to take the posttests, knowing when to contact the teacher for feedback, etc.).

---Related to this "pre-active" task analysis was the way the teacher gave feedback to the students about their behaviors. Not only did they initially present the details of how to do the task, but students were given very specific feedback, both positive and negative, that included information about the critical aspect of performance. For example, praise usually took the form of "I see that everyone who has gone to the pencil sharpener this morning has remembered the rules--only two at a time and no talking while there," rather than "You've been good about the pencil sharpener." Corrections often specified what the student should be doing and/or what was undesirable about the misbehavior. Obviously, the better managers were not highly specific about every feedback statement, but they almost always made their point. Often, earlier detailed instruction made it possible for the teacher to quickly but clearly communicate the need to change behavior. For example, a student who was up at an inappropriate time could be corrected with a "snap-point" to his chair, without any interruption of the teacher's ongoing instruction. This was specific, although not extended, but its effectiveness depended on how thoroughly the teacher had instructed that student in the discrimination of "appropriate and inappropriate times to be up," and on the student's knowledge that the teacher would follow through.

Such examples were more abundant at the beginning of the year, when much of the time was used by the better managers for instruction in good behavior and "going to school skills." (For more extensive discussions of

the beginning of the year, see Evertson & Anderson, in press; Anderson & Evertson, Note 5; and Emmer, Evertson, & Anderson, Note 6.) However, these characteristics were evident throughout the year. As late as May, the better managers were still observed being specific about both praise and criticism, still calling the students' attention to the salient aspects of "good behavior" when the teachers felt that the students needed instruction. This was especially evident when there were changes in routines (such as a new schedule or a new learning center added to the room) and after a long break from the usual routine (e.g., after Christmas, after the teacher had been absent for a few weeks). These behavioral reminders in the better managers' classes were not at all like "nagging." Instead, they were delivered in a matter-of-fact manner and served as signals to help the students control their own behavior.

In summary, the better managers seemed to consider the task of controlling student behavior as an instructional challenge that required the same approach taken to instruction in other curriculum areas. First, they analyzed the task at hand, deciding what skills were necessary for the students to perform as desired. Then, they presented the task to the students in as small steps as necessary to allow understanding. Then, the students were allowed to practice the skills and receive feedback. The feedback was diagnostic and remediative when necessary, and was usually specific. Essentially, the better managers seemed to view the task as one of teaching students important discriminations: between appropriate voice levels when talking, between times when one could go to the pencil sharpener and when one could not, between moving through transitions at a satisfactory pace and moving too slowly, and so forth. They were systematically and constantly giving the students information about what

"good behavior" was like in that class and how they could achieve it. They engineered the tasks, especially at the beginning of school, so that it was possible for students to succeed, and the teachers told them when and how they were succeeding. Then, their students' successful performance may also have become an important source of information--once students knew what appropriate behavior felt like, they could more easily recognize it and monitor themselves.

In contrast, the less effective managers were less effective instructors in the skills of "good behavior." In analyzing the teachers' behaviors, it is easy to see how the students were not adequately informed about what was expected of them:

---The less effective managers did not seem to have clearly formed ideas of what students' behavior should look like, and often waited until after problems developed before talking with the students about expected behaviors. Many of them appeared to have no clearer expectations than working quietly most of the time and attending to the teacher when he or she desired. They seemed to expect the students to know what this entailed. Therefore, there was very little specific instruction in distinguishing between appropriate and inappropriate behavior.

For example, some teachers failed to present any rules about movement around the room and to the bathroom and pencil sharpener until after many students had already come and gone several times. Even after introducing rules, the less effective teachers were often inconsistent about enforcing them (e.g., on the first morning, a teacher saw a long line at the pencil sharpener, reminded the students that only two students should be there, and then said, "Well, you need to sharpen your pencils, so it's all right."). Practitioner wisdom has always emphasized the importance of

consistency and followthrough in developing teacher credibility. When analyzing such instances for the information that the students are receiving, it is easy to see that inconsistent enforcement of a rule communicates to the student that what the teacher says in establishing a rule does not determine what will happen.

---The less effective managers often did try to instruct their students in important behaviors, but usually their instruction did not reflect adequate task analyses or an understanding of the students' cognitive capacities. Often, students were given too much information at once or were given too little time to practice a procedure. For example, one teacher, using a complicated individualized reading program, introduced three new types of activities at once and only briefly reviewed the instructions before expecting the students to use the skill boxes on their own. It was doubtful that most of the students actually were informed about how to do the new exercise.

---In addition to failing to describe expected behavior to the students before they misbehaved, the less effective managers provided less clear feedback through corrections and praise. Such messages often failed to provide students with adequate information about their behavior and how it met or differed from the teacher's expectations. Often, there was simply a failure to provide feedback, either positive or negative. In this case, the teacher's failure to react provides information to the students, although the message is likely not one that the teacher intended to send.

---Very ambiguous corrections were heard in the classrooms of the less effective managers, such as "Sit down and do something constructive!" or "Some of my boys and girls are getting too noisy." Also typical was "Get quiet!" when excessive talking was only one symptom of a larger pattern of

student off-task behavior. It is difficult to evaluate single corrections out of context; the same words said by a more effective manager may have had a very different effect because of the history of that class. However, the point here is that these examples were typical of the corrections of the less effective managers.

---Praise was frequently in the form of "You're being so good today" with no more specifics. Public praise was used frequently, but it was often timed so that it came only when a problem developed with another student. The teacher, having had behavior modification theory instilled in him or her, would typically look around for a student who was working and say, "I like the way Tom is sitting and working quietly." When this was used extensively, we expect that the meaning communicated to the students was that public praise was the teacher's indirect way of communicating displeasure with someone else. (When overused, it was not an effective correction technique either.) This meaning contrasts to that conveyed by a more effective manager who uses public praise to indicate genuine pleasure with a student's or group's behavior, and who highlights the important aspects of the target behaviors (e.g., "Table 3 is completely ready now. They have everything cleared except for their notebooks and pencils. That's great!").

---The less effective managers seemed to view the control of student behavior as dependent on their authority and the students willingness to cooperate, rather than seeing the need to instruct the students about good behavior. Sometimes, the teachers clearly laid the blame for misbehavior on the students' inability or refusal to cooperate in a school setting. For example, in one school that served primarily low-SES, minority students, one of the less effective teachers in the sample told us that she

could not use learning centers as after-work options, because the students just did not know how to use them properly. She also said that she could not depend on the students to take assignments off the blackboard, because they were not able to keep the information straight. In the same school, another teacher, classified as one of the more effective managers, working with similar students, successfully used learning centers. Her students were eventually able not only to use information off the board but to function independently in many other ways. However, this second teacher was one who was very specific about desired behaviors, and who carefully instructed her students in many aspects of good behavior and in "going to school" skills. She recognized that her students were "disadvantaged" in some ways, but she compensated for that by teaching them the skills that they did not have upon entering school. Her attention to details continued throughout the year, and even in May she was frequently reminding (not nagging) the students how to behave. Her students maintained high levels of on-task behavior and had higher achievement, relative to the students in the other room.

Perhaps this focus on instruction in how to behave serves a dual purpose: It does teach skills where they do not exist, and exerting self-control and maintaining attention to school tasks does require certain skills. However, it may also be communicating to the students that the teacher knows what is going on, and can predict student behavior very well. This could not help but contribute to one's credibility.

Teacher Skills in Diagnosing Students' Focus of Attention

A third category of teacher behaviors that distinguished the two groups of teachers included skills of diagnosing students' needs for information and focus of attention. Here we consider teacher recognition

of student confusion or concerns as well as the monitoring behaviors that provide teachers with information about how smoothly events are going.

The effective managers knew what students were likely to pay attention to, what was likely to be confusing and distracting, and how to focus students on the desired targets of attention. Awareness was demonstrated in the pre-planning of activities, especially at the beginning of school, although it was evident throughout the year. This sensitivity to elements of a situation that are most salient to students was probably part of the ability to analyze the tasks of good behavior and "going to school" skills discussed above; therefore, it is a prerequisite to instructing students in good behavior.

One aspect of this sensitivity, especially at the beginning of the year, was the effective managers' apparent awareness of what we termed "student levels of concern." Upon entering a new situation, concerns at a "personal" level are likely to dictate what one attends to most easily (Hall, 1976). More effective managers started out the school year with activities that provided information about personal needs, such as getting students' names correct, arranging for space for each child and possessions, and explaining very early about basic routines, such as the bathroom, lunch, and getting water. In addition, the teachers immediately began to establish an atmosphere of fairness and of enjoyment. One way of interpreting the teachers' choices of initial topics is that the more effective managers knew that the students were more likely to pay attention to information about these more personal needs. They were of more immediate concern than, say, how to cover one's books or how to use the programmed reading series. By beginning with very practical and personally meaningful matters, the teachers could begin with higher levels of

attention. Once the more personal matters were dealt with, and the teacher had begun to establish her trustworthiness (as someone who knew what was most important to the students), then other, more directly task-related matters were dealt with.

In addition, the better managers were constantly monitoring the class to determine that the students were attending to the tasks set by the teacher, and if not, why not. This is certainly not a surprising finding, as the importance of monitoring has been demonstrated before (e.g., Brophy & Evertson, 1976; Kounin, 1970). Doyle (1979) discusses monitoring as evidence of teachers' sophisticated information processing. He maintains that experienced teachers process much classroom stimuli automatically, without it ever rising to conscious attention. Only when the incoming signals indicate a discrepency in standards for cooperation does the information received through monitoring become conscious and result in teacher reaction.

Doyle's portrayal matches the impressions formed in this study: the more effective manager is an active decision maker who is constantly receiving and processing information about classroom activities and adjusting those activities as necessary. These data suggest that the information that is most salient to the teacher is the students' attention focus.

Examples of activities of the more effective managers that illustrate these points include:

---arranging the desks and chairs so that the students are facing or can easily face the point in the room where they must focus most often.

---using various "tricks" for grabbing students' attention during lessons (moderating voice, movement, and pace).

---scheduling so that the students can, when necessary, "ease into" the morning's work by activities in which it is easy to focus attention and participate right away (especially when children or groups of children have difficulty "settling in" at first).

---very clearly starting and stopping activities, providing warnings before transitions, and using other strategies that help to break ongoing momentum when necessary as well as to restart it (this point was also discussed by Arlin, 1979).

---spacing directions for two similar activities so that they are not confusing, rather than presenting them simultaneously.

---requiring students to keep books closed until the teacher finishes part of an explanation, when looking in the books rather than at the teacher would have led to confusion.

---in general, requiring the active attention of every student when important information is being given.

The more effective managers demonstrated an understanding of what Kounin and associates (Kounin & Doyle, 1975; Kounin & Gump, 1974) called the signal system properties of lessons. Signal systems were provisions within lessons that "oriented, prodded, and supported" students' actions and attention. We saw many examples in which teachers' selections of activities seemed to be determined by an understanding of what students needed in order to attend and stay on-task. For example, one of the more effective managers had a group of boys who were very low achievers in reading and who had great difficulty in keeping themselves on-task. Rather than giving them long independent assignments, as could be done with some others in the class, the teacher arranged their reading activities so that they could easily focus their attention on the content. She met with them

first, keeping up a fairly rapid pace in her reading instruction. Then, she dismissed them to perform an assignment at the listening center, where the voice on the tape offered a salient and continuous source of signals. After they were finished with that and had a short time working at their seats, she met with them again briefly to check their work. Then, they had about 15 minutes to work independently, although the teacher sat so that she could monitor them while she taught another group. After performing their seatwork assignment, they went to a Language Master machine and practiced skills there. The result was that the boys were engaged and attending to instructions or actively practicing skills most of the morning, because the teacher had selected activities and arranged the schedule so that they did not have to depend for long periods of time on their own self-control.

Contrast this to a similar reading group (also an all-boy group) in the same school in a class where the teacher was a much less effective manager. She also saw this group first thing that morning, but the lesson was very slow, and she had to leave the group several times to attend to other students. After the lesson, she gave the boys written assignments to do for the rest of the morning. However, they were observed doing very little work, frequently were up out of their seats, talking and occasionally bothering other students. The observer reported very little time on task for these low achieving boys.

Needless to say, the two classes differed in other ways than the activities given the reading groups. The point here is that the first, more effective teacher's planning and lesson conduct seemed to be based on diagnosis of the boys' attention span and an understanding of the "signal system" inherent in various instructional activites. She kept the boys

"plugged in" to very salient and continuous signals for most of the morning, and spaced out the times when they were to work independently at their seats so that they could do so successfully for brief periods.

Examples are given below of activites of the less effective managers that demonstrate less understanding of students' attention focus and the signals and stimuli inherent in various lessons and activites:

---Calling for transitions suddenly, when some students are still in the middle of a task and have not been warned about the change (also as discussed by Arlin, 1979);

---Giving complex instructions orally without putting them on the board or otherwise helping the students remember;

---Leaving out a new exhibit (such as an animal), delaying an explanation until later, but expecting the students to ignore it for a while;

---Launching into a regular routine immediately after a holiday when the students are wanting to share their news with their friends (which they do for the rest of the morning, to the teacher's dismay);

---Presenting a difficult and frustrating math ditto within the first hour of the first day of school, before the students are familiar with the teacher and the room;

---Failing to provide a clock or reliable information about the time despite frequent student questions about how much longer they have to work;

---relying heavily on long stretches of seatwork for all students with few or no breaks.

The less effective managers seemingly expected the students to exhibit self-control in a situation that offered too many competing stimuli or that

did not offer salient stimuli that prevented boredom and inattention. In contrast, the more effective managers, although they expected the students to exhibit self-control and maintain on-task behavior, knew what signals and what information would be attended to, and they planned activities so that self-control by students was easier.

One pattern that should be examined with these data is whether external controls on attention were removed over the course of the year. That is, in the more effective manager's classes, did the students actually improve their abilities to maintain their attention on-task, or was the engineering of "signal systems" necessary all year?

Discussion

The three clusters of teacher behaviors are obviously closely related to one another--the better managers were performing each set of tasks simultaneously, and the less effective managers had shortcomings in each area. The better managers were providing information to students about how to behave, setting up an environment in which there were reasons to perform on-task behaviors (because of the accountability and apparent purpose), and also engineering the environment by assigning tasks and activities in which it was possible for the students to be accountable and successful. The less successful managers did not consistently hold their students accountable or communicate purposes to them that would encourage on-task behaviors; they were also generally ambiguous about exactly what was expected from the students; and they often put their students into situations when appropriate behavior (attention to task) was difficult to accomplish, either because of a lack of information or because of distracting stimuli.

One theme that ties together these three ways of describing teacher behavior is the apparent teacher focus (or lack of it) on what students understand and what they need to know to accomplish any particular behavior. Therefore, the classes can be analyzed in terms of the information flow from the teacher to the students (both directly and in terms of the materials and activities provided by the teacher), and from the students to the teacher (who adjusts, or fails to adjust, according to the success of the students at attending to the desired focus). From this point of view, classroom management may be considered to be primarily the provision of information (both initially and as feedback) about on-task performance, and the provision of activities that facilitate on-task behavior. As such, it is analogous to the other set of responsibilities that are more traditionally termed "instructional," in which teachers also provide information about the content to be learned, and then create tasks for the students to apply their knowledge of the content.

This description of management as the establishment and maintenance of information flow is most easily applied to the beginning-of-the-year activities, but it is not limited to that time. However, events that occur during the rest of the year can only be interpreted in the context of the initial information provided by the teacher about "the way things work" in the classroom. A teacher may provide a great deal of information in a very brief corrective statement, if it has been preceded by careful specification of the difference between appropriate and inappropriate behavior in those circumstances, and also by consistent enforcement that has communicated that the teacher will follow through on the correction.

Obviously, there are other ways of examining management tasks of teachers, and other elements are necessary for overall managerial

effectiveness than the provision of clear information about how and why on-task behavior will be accomplished. As Kounin (1970), Brophy and Evertson (1976), and others have pointed out, adequate instructional programs are also necessary. If the tasks given students do not have the appropriate balance of challenge and success, then the students are not likely to either stay on-task or to be learning efficiently. Also, certain personal characteristics of the teacher are important. Although many different "styles" may be observed among effective teachers, certain basic requirements seem to be an underlying ego strength and comfort in interpersonal situations (Brophy & Putnam, 1979).

Other aspects of classroom life that affect the success of management strategies include the background and culture of the students and the influences of the peer group on its members. Although we have not systematically documented it, we suspect that the more effective teachers in the sample had knowledge of the social characteristics of their groups, and this figured heavily into their diagnosis and understandings of students' likely targets of attention and concerns. However, we have less information on the "peer cultures" of the classrooms than we do on the more clearly managerial behaviors of the teacher.

This paper has presented several hypotheses that may be supported by a more systematic analyses of the narrative descriptions. We have assumed that student understanding of teacher communications and teacher diagnosis of that student understanding are important constructs that will help us describe the differences between more and less effective managers.

At present, the narrative case studies of the most and least effective managers are being examined and examples of these three clusters of teacher behaviors are being highlighted. Hopefully, the final outcome will be a

collection of case studies analyzed in terms of the likely information conveyed by the teachers to the students and the students' responses.

If these dimensions or constructs prove to be useful in that respect, there are several ways in which further research could verify the assumptions underlying them. A descriptive study of students' perceptions and interpretations of teachers' behaviors within various contexts would help to link student and teacher behavior. At present, there are research studies of student perceptions of the achievement hierarchy within the classroom and of student interpretations of certain teacher behaviors with regard to high and low achievers (Weinstein & Middlestadt, in press, Note 7). However, there has been little research on what teacher managerial behaviors mean to students, and how that meaning influences student behaviors. It would be valuable to know what aspects of teacher behaviors are most salient to students, and how individual differences among students affect their perceptions.

Likewise, further work on teachers' use of cues from students would be informative. Research done on teachers' decision making and information processing clearly indicates that teachers do rely on cues from students to adjust activities (Doyle, 1979; Peterson & Clark, 1978; Cone, Note 8; MacKay & Marland, Note 9). There should be continued work along these lines to ascertain what dimensions of student behavior are most salient to teachers who are better classroom managers and monitors.

If the ideas described in this paper are supported by a more extensive examination of the data, they may be useful even before research on the underlying assumptions is done. Their greatest value will lie in their usefulness to teachers as concepts with which to examine their own behavior. An experimental program could be developed around these

constructs and others suggested by research to determine if focusing on these aspects of teaching leads to improved management. For example, what would be the effects of asking teachers to reflect systematically on the meaning of their behaviors to students, especially if they are given objective feedback about their own behaviors? Other experimental studies in which teachers were provided with general concepts as well as some specific suggestions have led to changes in teacher behaviors (in the desired directions) as well as improved student outcomes (e.g., Anderson, Evertson, & Brophy, 1979; Good & Grouws, in press). The ideas presented here, illustrated with both positive and negative examples from the actual case studies, could form the basis of a similar experimental study.

Reference Notes

1. Evertson, C., & Anderson, L. The classroom organization study: Interim progress report (R&D Report No. 6002). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1978.

2. Fisher, C., Filby, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J., & Berliner, D. Teacher behaviors, academic learning time and student achievement: Final report of Phase III-B, beginning teacher evaluation study. San Francisco: Far West Laboratory of Educational Research and Development, June, 1978.

3. McDonald, R., & Elias, P. The effects of teaching performance on pupil learning, beginning teacher evaluation study: Phase II, Final report (Vol. I). Princeton, N.J.: Educational Testing Service, 1976.

4. Stallings, J., & Kaskowitz, D. Follow through classroom observation evaluation, 1972-1973. Menlo Park, Calif.: Stanford Research Institute, 1974.

5. Anderson, L., & Evertson, E. Classroom organization at the beginning of school: Two case studies (R&D Report No. 6003). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1978.

6. Emmer, E., Evertson, E., & Anderson, L. The first three weeks . . . and the rest of the year (R&D Report No. 6005). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1979.

7. Weinstein, R., & Middlestadt, S. Learning about the achievement hierarchy of the classroom: Through children's eyes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April, 1979.

8. Cone, R. Teachers' decisions in managing student behavior: A laboratory simulation of interactive decision-making by teachers. Paper presented at the annual meeting of the American Educational Research Association, Toronto, March, 1978.

9. MacKay, D., & Marland, P. Thought processes of teachers. Paper presented at the annual meeting of the American Educational Research Association, Toronto, March, 1978.

References

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 1979, 16(1), 42-56.

Anderson, L., Evertson, C., & Brophy, J. An experiemental study of effective teaching in first-grade reading groups. Elementary School Journal, 1979, 79, 193-223.

Brophy, J., & Evertson, C. Learning from teaching: A developmental perspective. Boston, Mass.: Allyn and Bacon, Inc., 1976.

Brophy, J., & Putnam, J. Classroom management in the elementary grades: A literature review. In D. Duke (Ed.), Classroom management, seventy-eighth yearbook of the national society for the study of education. Chicago, Illinois: University of Chicago Press, 1979.

Doyle, W. Making managerial decisions in classrooms. In D. Duke (Ed.), Classroom management, seventy-eighth yearbook of the national society for the study of education. Chicago, Illinois: University of Chicago Press, 1979.

Evertson, C., & Anderson, L. Beginning school. Educational Horizons, in press.

Good, T., & Grouws, D. The Missouri mathematics effectiveness project: An experimental study in fourth-grade classrooms. Journal of Education Psychology, in press.

Hall, G. The study of individual teacher and professor concerns about innovations. Journal of Teacher Education, 1976, 27, 22-23.

Kounin, J. Discipline and group management in classrooms. New York: Holt, Rinehart, and Winston, 1970.

Kounin, J., & Doyle, P. Degree of continuity of a lesson's signal system and the task involvement of children. Journal of Educational Psychology, 1975, 67, 159-164.

Kounin, J., & Gump, P. Signal systems of lesson settings and the task-related behavior of preschool children. Journal of Educational Psychology, 1974, 66, 554-562.

Peterson, P., & Clark, C. Teachers' reports of their cognitive processes during teaching. American Educational Research Journal, 1978, 15, 555-566.

Rosenshine, B., & Berliner, D. Academic engaged time. British Journal of Teacher Education, 1978, 4, 3-16.

Weinstein, R., & Middlestadt, S. Student perceptions of teacher interactions with male high and low achievers. Journal of Educational Psychology, in press.

Wiley, D., & Harnischfeger, A. Explosion of a myth: Quantity of schooling and exposure to instruction, major educational vehicles. Educational Researcher, 1974, 3, 7-12.

Dimensions in Classroom Management

Derived from Recent Research

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Abstract

A year-long study of 28 third-grade teachers yielded extensive and rich narrative data describing their management practices from the beginning of the year. The seven most effective and seven least effective teachers were compared to determine what dimensions of management discriminated between them. Analyses are still in progress, and this paper presents some working hypotheses about the differences between the two groups of teachers. Teacher behaviors are examined for the information that was conveyed to students about the purposes of cooperative behavior and how to behave in the classroom. In addition, the teachers' skills at diagnosing students' needs for information and immediate concerns are discussed. The latter is related to the teachers' abilities to manipulate the "signal systems" of activities and maintain the students' attention.

Dimensions of Classroom Management Derived from Recent Research

This paper presents some results from a large study of classroom management in third-grade classrooms. Data are still being analyzed; therefore, this report is limited to several working hypotheses about ways that more and less effective managers differ. This paper was the basis of an oral presentation; a detailed paper is in progress which will more systematically incorporate observational data.

The Classroom Organization Study was conducted by the Research and Development Center for Teacher Education during the school year 1977-78. The purpose of the study was to gather extensive information about how third-grade teachers in low-SES schools organized their classes at the beginning of the year and how subsequent management was affected. The background and methodology of the study are given in Evertson and Anderson (Note 1). Impetus for the study was provided by the local school district administrators, who asked the researchers to gather information about management practices in low-SES elementary schools, with the ultimate objective being use of the information in in-service and pre-service programs.

Because of this practical objective, most of the data collected in the study were descriptive and narrative, in order to provide specific examples of more and less effective strategies. However, quantitative data were also collected about rates of student on-task behavior in order to verify subjective impressions.

The observers were trained to focus on certain common activities and behaviors that we expected to be pertinent to classroom management

(observer guidelines and training are described in Evertson and Anderson, Note 1). However, the researchers did not know in advance what larger categories or global dimensions of behavior would be useful in analyzing the descriptions. Although there has been much useful work done on management, most of it is descriptive of what good managers are doing once the school year is established. For example, we expected to find that better managers would be "withit," would maintain momentum in lessons, would carefully monitor student behavior, would have lower rates of student misbehavior and higher rates of student engagement on academic work, and would have more efficient transitions and time use in general. In a sense, these characteristics, described by Kounin (1970), Brophy and Evertson (1976), and others, are the effects of the establishment of an efficient management system. They did not inform us about how teachers could reach that point, or why certain kinds of strategies might be most effective. Therefore, the data gathered about the beginning of the school year and subsequent management practices were not coded into preconceived categories of teacher behavior, because we were not sure what categories would be most important to describe the causes and mediators of effective management.

Because the data were descriptive and narrative, the data analysis activities have been largely inductive. The authors read narratives of the 27 teachers (no small feat, in that each teacher's file includes about 200 pages describing at least 40 hours of observation.) After initial reading and discussion, agreement was reached about some ways that the teachers' management could be described and summarized. We began to digest the descriptions by rating and summarizing the teachers on several dimensions that implied effectiveness of management. These "reader ratings" were used along with other information to form a composite criterion measure of

managerial effectiveness. After classifying teachers into groups that differed in effectiveness, we reread the descriptions, and, in conjunction with other data analyses, have begun to refine our understandings of how management systems were established and maintained. Although that activity is still in progress, several ideas are presented here that we expect to be useful in analyzing differences between more and less effective managers.

First, however, our criteria of "good management" should be spelled out more clearly. We conceived of "management activities" as anything that the teacher did to organize students, space, time, and materials so that instruction in content and student learning activities could take place. Therefore, management was considered to encompass much more than discipline and enforcement of rules about noise and movement, although these tasks may be considered as part of overall management.

One goal of the study was to identify management practices that maximized the the time that students spend actively engaged in learning activities (e.g., receiving instruction, completing written assignments, reading, doing projects.) We were committed to this goal because of an interest in increasing academic achievement in the basic skills. Much other research has demonstrated links between the amount of time that students spend actively engaged with academic content and the amount of achievement in that content area (e.g., Rosenshine & Berliner, 1978; Wiley & Harnischeger, 1974; Fisher, Filby, Marliave, Cahen, Dishaw, Moore, & Berliner, Note 2). Other research had also suggested that teachers who were better classroom managers were able to maximize this engaged time. For example, these are some specific correlates of achievement that can be interpreted as management functions and outcomes that may contribute to higher engagement: shorter, more efficient transitions, fewer student

misbehaviors, more use of routines and procedures to handle daily business, and arranging for sufficient appropriate work with minimal time when students are unoccupied (Anderson, Evertson, & Brophy, 1979; Brophy & Evertson, 1976; Brophy & Putnam, 1979; McDonald & Elias, Note 3; Stallings & Kaskowitz, Note 4).

Therefore, our criteria for "good management" were a high degree of apparent on-task involvement by the students with a minimum of misbehavior, and efficient use of class time devoted to academic activities. We classified teachers as "better managers" when: 1) they demonstrated leadership in controlling students' behavior, taking responsibility for students' engagement in learning activities and clearly instilling and enforcing expectations for such behavior; and 2) their management strategies reflected instructional leadership in that they scheduled most of the school day for productive work, they provided adequate, involving work for the students to do, and they made sure that learning was taking place.

There are many possible ways of describing classroom management, but no single conceptual scheme or set of dimensions can adequately account for all aspects of management. Therefore, the following ideas are not presented as a unified theory or model, but instead as one framework that may help practitioners think about and make decisions about management. Basically, management strategies are discussed in terms of the information that is conveyed to the students about why they should cooperate and stay on-task, and how they should do so.

For many years, practitioner wisdom has emphasized the importance of "teacher credibility." Experienced teachers know that students do not take all teacher statements at face value, and that "actions often speak louder

than words." This assumes that what a student understands about a teacher's meaning may be different and more important than the teacher's intention.

Therefore, it seems useful to look at teachers' management behaviors in terms of what they are likely to mean to the students--what information is conveyed about the way the classroom operates. What the teacher says, and fails to say, and what the teacher does, and fails to do, all inform students about what behaviors are expected, what will be tolerated, and what will be rewarded and punished.

This point of view assumes that the student is the critical mediator of the teacher's management strategies: if students (both individually and as a group) do not understand and/or accept the teacher's version of desired behaviors, then the management system does not accomplish its objectives of creating those behaviors. Therefore, what may be most important about what teachers do to manage their classrooms is what the students accept and understand.

At this point, with this set of data, we must make some assumptions about what the students understand and how they perceive the teacher's management strategies. We do not have direct information about student perceptions. However, we do have data on student behavior, and we are assuming that a generally high level of cooperative, on-task behavior reflects student acceptance and knowledge of the teacher's behavior standards. We are assuming that a teacher whose students demonstrate "good behavior" and higher rates of on-task involvement has succeeded in establishing the reputation as a credible leader of the class. We are also assuming that he or she achieved this state by several behaviors that communicated to the students why and how they should behave in desired

ways. Therefore, we are examining teachers' managerial behaviors for the quality of information conveyed to the students about desired behavior.

Obviously, student influence on the teacher and on classroom processes can not be ignored. Students enter a new classroom with some knowledge of what to expect, and they often enter with very different objectives than the teacher (Doyle, 1979). Admittedly, some groups of students are easier or more difficult to manage than others. Home and school factors outside her control still affect a teacher's job. However, it is important to remember that, in spite of all of the other influences on students' behavior, the individual teacher can make a tremendous difference. As one example, consider the teachers in the present study. Of the 14 teachers identified for intensive analysis because of their very high or very low ratings on managerial effectiveness, there are six pairs within same schools who are rated at opposite extremes. That is, the teachers in a pair can be contrasted as being very high or very low in effectiveness, but they were working in the same schools with similar students. Therefore, we believe that the student influence, although admittedly important, is not the primary determinant of the effectiveness of a teacher's management system. However, as will be pointed out below, the more successful managers seemed to be very sensitive to what their students were learning about the way the classroom would run and their roles in it.

Below are presented three clusters of teacher behaviors that have implications for the quality and quantity of information provided to students:

1. Teacher behaviors that may convey purposefulness and meaningfulness of academic activities (i.e., the students are informed about <u>why</u> on-task behaviors are important).

2. Teacher behaviors that instruct students in the skills of good behavior (i.e., the students are informed about how to behave).

3. Teacher behaviors that imply a sense of students' level of understanding and need for information and teacher selection of activities that reflect this.

Teacher Behaviors That May Convey Purposefulness

Teachers who were better managers demonstrated many behaviors that probably were conveying purposefulness and seriousness about school learning to the students. In so doing, they were providing a rationale for expected performance--telling the students why it was important that they cooperate and stay involved in school tasks. In contrast, teachers who were less good managers often behaved in ways that may have communicated a lack of clear purpose and a feeling that "going through the motions" was adequate, that filling in the time with acceptable activities was the most important objective each day.

Many of these behaviors may seem more "instructional" than "managerial," but they are included here because they required decisions by the teacher about classroom routines and allocation of time.

Some of the behaviors in this realm demonstrated by the more effective managers were:

---Students were held accountable for completing work within the time allotted. In order to insure this, the teachers frequently reminded the students about the time, and helped them learn to use the clock to pace their work. When a student's work was not completed within the allotted time, he or she generally finished it after school or during a "free time."

(The teachers were not inflexible, of course, and made other arrangements when the student's failure was reasonable.)

---The teachers scheduled regular times each day for themselves to review the work of the preceding period (such as the morning seatwork and reading group time). In this way, they quickly determined if anyone was having difficulty completing the work, and offered assistance as soon as possible.

---The teachers also regularly and systematically circulated through the room during seatwork periods, so that each student was checked frequently.

---Another way in which teachers held students accountable was by requiring participation by all students in group activities. This meant requiring attention as well as participation. One teachnique used frequently was patterned turns, (i.e., insuring that everyone had equal and predictable opportunities to respond) although this was not used in all contexts.

---There were regular procedures for turning in completed work and noting student progress.

---Another way in which teachers probably communicated seriousness about school tasks was by systematically providing feedback to the students about how well they had done. The students were accountable for doing their work, but the teacher also held herself or himself accountable for quickly returning it to them. In order to accomplish this, various systems were established. One teacher set up mailboxes for each student, and they knew to check them each afternoon. Another teacher established the first 15 minutes of the morning for the return of the previous day's papers.

When students had made errors, they were to correct them and then file them in a designated box. The teacher would check the box during the day.

---Many of the teachers who set aside time each morning to review the work also used that time to provide immediate feedback to students who needed it.

---In general, most contacts about work by the more effective managers were task-oriented; it seemed apparent that the teacher's concern was that the student learn the content, not simply that he or she be still and quiet and finish the work.

---The better managers' use of time demonstrated a concern with the importance of instruction. Time spent in necessary procedural matters (lunch money, roll call) was minimized; often, teachers performed such duties while the students were occupied with a task. Materials and supplies were ready in advance of activities, and the teacher spent most of the school day in actual instruction, except for the times required to review student progress to determine the need for feedback.

---The teacher projected a positive attitude about the work, suggestive of its importance. For example, work that was done well was regularly displayed, with the desirable qualities often highlighted in some way. Again, such behaviors may seem more instructional than managerial, but they required planning by the teacher for use of classroom space, preparation and changing of bulletin boards, etc.

In summary, the better managers established classrooms with routines and procedures that insured that instruction and learning took top priority, and that the students were informed about their responsibilities for performing the work, as well as about the importance of the work to the teacher. This does not mean that the better managers were stern

task-masters who ruled by the clock. Instead, their classrooms were very congenial and pleasant, but definitely oriented toward learning academic content.

Such teacher behaviors, performed consistently from the very beginning of the year, may have informed the students that there were reasons for cooperating with the teacher and behaving well--perhaps because it was the means to the larger goal of learning the content. Obviously, other factors are involved than the recognition that "Teacher means business," but this was one area where the differences between the better and poorer managers were quite apparent.

For example, the less successful managers, in contrast, behaved in these ways that may have communicated a very different attitude:

---There was less sense of student accountability. Frequently at the end of an allotted work time, the teacher would say, "Who needs more time?" Even when many of the students had been wasting time or socializing, the teacher provided more time to finish.

---Often there was not a set routine for turning in papers, and confusion existed during some transitions about what was to be done with completed work.

---Discussions frequently were conducted without many students participating. The most frequent methods of selecting students to answer were allowing them to call out and relying on volunteers, so that only the most eager students responded.

---Likewise, circulation among students working at their seats was often unsystematic, with the teacher responding to those students who attracted his/her attention, and often missing more reticient students or students who may have avoided him or her.

---There was little evidence of systematic efforts to provide feedback on completed work or on good behavior. Occasionally papers were returned during observation, but seldom were students given specific instructions to pay attention to them or to correct errors that they may have made. Systems to reward good behavior (such as tokens) were not used consistently.

---Time seemed to be a gap to be filled, not a resource to be used. Ways that the teachers' behaviors may have communicated this were spending longer than necessary on routines like PTA form collection, leaving groups of children without adequate work to do for long periods, and spending class time preparing materials for the next activity. In many classes, transitions between activities took up a substantial portion of the time devoted to the activity, and the teacher did not indicate displeasure at this. In fact, many of the less effective managers let the students control the pacing of the transition. The teacher did not attempt to get their attention and begin the next lesson until all students had moved into position, despite many of the students wasting time or seeing to personal needs at inappropriate times. (Similar findings about transitions are reported by Arlin, 1979.)

---Many teacher statements implied that the most important thing about the schoolwork was that the students would be quiet and still if they were doing it. That is, the teacher's priorities seemed to lie more in the behavior that accompanied work than in the learning. The work was often presented as disagreeable, or even as a punishment, although this was not true of all of the less effective managers.

---Although good work was sometimes displayed or good behavior rewarded, this was not always done so that many students were aware of it or understood why it was good.

In summary, the less effective managers behaved in ways that may have communicated that actual learning performance was not the most important goal of the class; instead, minimizing noise and activity and filling up the time with assignments seemed more important. The students did not receive regular feedback on how well they did on assignments, although they were expected to complete them. Since appropriate (i.e., in this case, calm) behavior, in and of itself, is not likely to be a satisfying goal for most young students, this purpose, if communicated, is not likely to inspire the behaviors desired by the teacher.

In many cases, it is likely that the less effective managers were indeed concerned about how their students were learning. However, they had not organized the day's time and activities so that their concern was communicated. The observations indicate, in fact, that the students may have had a very different picture. That is, the information they received about the goals of the classroom--why good behavior was desirable--did not emphasize the importance of learning the academic content.

Teacher Behaviors that Teach Students How to Behave Appropriately

A second kind of information that students appear to need (i.e., they were better behaved--more involved with tasks--when they had apparently received it) is how to perform expected behaviors. This was recognized by teachers who instructed the students in good behavior and in "going to school skills." Several teacher behaviors suggested to us that the better managers viewed cooperative behavior as a set of skills that had to be taught to the students, either by instructing them in sequential procedures

or by calling their attention to the critical aspects of a simple behavior. The less effective managers, on the other hand, either expected their students to know how to behave well (i.e., they did not highlight the specific and relevant aspects of "good behavior" or made statements implying that the students could behave well if they simply decided to) or they offered inadequate instruction in how to behave.

The better managers may be characterized in these ways:

---They knew what student behaviors were desired and what would not be tolerated. Their expectations were very clear and expressed in behavioral terms. These reflected a superb task analysis, resulting in both a collection of subskills necessary to perform the total behavior, but also an understanding of what it would take to coordinate the separate subskills. There was a focus on what students should be doing, as well as on what they should not be doing. For example, the beginning of school was characterized as a time to learn classroom rules and procedures, and the better managers deliberately planned time to practice and review the behaviors involved. Specifics included everything from how to sit on the rug in large group meetings (i.e., around the edge, with some space around each child), to how to go to the bathroom (i.e., when it was appropriate to go without permission, how to knock, how to respond when someone knocked, and remembering to flush and throw away paper towels).

---The better managers' abilities in these areas extended beyond the "good behaviors" that were necessary to maintain acceptable levels of order and quiet, and also included skills more closely related to performing school work. For example, teachers did not assume that students knew how to follow instructions for a workbook exercise, or how to take an assignment off the board and find the problems in the book. Instead, they

determined if the students had these skills, and if not, they taught them. Another example of such skills is learning to use a programmed reading series (how to interpret the symbols, knowing when to take the posttests, knowing when to contact the teacher for feedback, etc.).

---Related to this "pre-active" task analysis was the way the teacher gave feedback to the students about their behaviors. Not only did they initially present the details of how to do the task, but students were given very specific feedback, both positive and negative, that included information about the critical aspect of performance. For example, praise usually took the form of "I see that everyone who has gone to the pencil sharpener this morning has remembered the rules--only two at a time and no talking while there," rather than "You've been good about the pencil sharpener." Corrections often specified what the student should be doing and/or what was undesirable about the misbehavior. Obviously, the better managers were not highly specific about every feedback statement, but they almost always made their point. Often, earlier detailed instruction made it possible for the teacher to quickly but clearly communicate the need to change behavior. For example, a student who was up at an inappropriate time could be corrected with a "snap-point" to his chair, without any interruption of the teacher's ongoing instruction. This was specific, although not extended, but its effectiveness depended on how thoroughly the teacher had instructed that student in the discrimination of "appropriate and inappropriate times to be up," and on the student's knowledge that the teacher would follow through.

Such examples were more abundant at the beginning of the year, when much of the time was used by the better managers for instruction in good behavior and "going to school skills." (For more extensive discussions of

the beginning of the year, see Evertson & Anderson, in press; Anderson & Evertson, Note 5; and Emmer, Evertson, & Anderson, Note 6.) However, these characteristics were evident throughout the year. As late as May, the better managers were still observed being specific about both praise and criticism, still calling the students' attention to the salient aspects of "good behavior" when the teachers felt that the students needed instruction. This was especially evident when there were changes in routines (such as a new schedule or a new learning center added to the room) and after a long break from the usual routine (e.g., after Christmas, after the teacher had been absent for a few weeks). These behavioral reminders in the better managers' classes were not at all like "nagging." Instead, they were delivered in a matter-of-fact manner and served as signals to help the students control their own behavior.

In summary, the better managers seemed to consider the task of controlling student behavior as an instructional challenge that required the same approach taken to instruction in other curriculum areas. First, they analyzed the task at hand, deciding what skills were necessary for the students to perform as desired. Then, they presented the task to the students in as small steps as necessary to allow understanding. Then, the students were allowed to practice the skills and receive feedback. The feedback was diagnostic and remediative when necessary, and was usually specific. Essentially, the better managers seemed to view the task as one of teaching students important discriminations: between appropriate voice levels when talking, between times when one could go to the pencil sharpener and when one could not, between moving through transitions at a satisfactory pace and moving too slowly, and so forth. They were systematically and constantly giving the students information about what

"good behavior" was like in that class and how they could achieve it. They engineered the tasks, especially at the beginning of school, so that it was possible for students to succeed, and the teachers told them when and how they were succeeding. Then, their students' successful performance may also have become an important source of information--once students knew what appropriate behavior felt like, they could more easily recognize it and monitor themselves.

In contrast, the less effective managers were less effective instructors in the skills of "good behavior." In analyzing the teachers' behaviors, it is easy to see how the students were not adequately informed about what was expected of them:

---The less effective managers did not seem to have clearly formed ideas of what students' behavior should look like, and often waited until after problems developed before talking with the students about expected behaviors. Many of them appeared to have no clearer expectations than working quietly most of the time and attending to the teacher when he or she desired. They seemed to expect the students to know what this entailed. Therefore, there was very little specific instruction in distinguishing between appropriate and inappropriate behavior.

For example, some teachers failed to present any rules about movement around the room and to the bathroom and pencil sharpener until after many students had already come and gone several times. Even after introducing rules, the less effective teachers were often inconsistent about enforcing them (e.g., on the first morning, a teacher saw a long line at the pencil sharpener, reminded the students that only two students should be there, and then said, "Well, you need to sharpen your pencils, so it's all right."). Practitioner wisdom has always emphasized the importance of

consistency and followthrough in developing teacher credibility. When analyzing such instances for the information that the students are receiving, it is easy to see that inconsistent enforcement of a rule communicates to the student that what the teacher says in establishing a rule does not determine what will happen.

---The less effective managers often did try to instruct their students in important behaviors, but usually their instruction did not reflect adequate task analyses or an understanding of the students' cognitive capacities. Often, students were given too much information at once or were given too little time to practice a procedure. For example, one teacher, using a complicated individualized reading program, introduced three new types of activities at once and only briefly reviewed the instructions before expecting the students to use the skill boxes on their own. It was doubtful that most of the students actually were informed about how to do the new exercise.

---In addition to failing to describe expected behavior to the students before they misbehaved, the less effective managers provided less clear feedback through corrections and praise. Such messages often failed to provide students with adequate information about their behavior and how it met or differed from the teacher's expectations. Often, there was simply a failure to provide feedback, either positive or negative. In this case, the teacher's failure to react provides information to the students, although the message is likely not one that the teacher intended to send.

---Very ambiguous corrections were heard in the classrooms of the less effective managers, such as "Sit down and do something constructive!" or "Some of my boys and girls are getting too noisy." Also typical was "Get quiet!" when excessive talking was only one symptom of a larger pattern of

student off-task behavior. It is difficult to evaluate single corrections out of context; the same words said by a more effective manager may have had a very different effect because of the history of that class. However, the point here is that these examples were typical of the corrections of the less effective managers.

---Praise was frequently in the form of "You're being so good today" with no more specifics. Public praise was used frequently, but it was often timed so that it came only when a problem developed with another student. The teacher, having had behavior modification theory instilled in him or her, would typically look around for a student who was working and say, "I like the way Tom is sitting and working quietly." When this was used extensively, we expect that the meaning communicated to the students was that public praise was the teacher's indirect way of communicating displeasure with someone else. (When overused, it was not an effective correction technique either.) This meaning contrasts to that conveyed by a more effective manager who uses public praise to indicate genuine pleasure with a student's or group's behavior, and who highlights the important aspects of the target behaviors (e.g., "Table 3 is completely ready now. They have everything cleared except for their notebooks and pencils. That's great!").

---The less effective managers seemed to view the control of student behavior as dependent on their authority and the students willingness to cooperate, rather than seeing the need to instruct the students about good behavior. Sometimes, the teachers clearly laid the blame for misbehavior on the students' inability or refusal to cooperate in a school setting. For example, in one school that served primarily low-SES, minority students, one of the less effective teachers in the sample told us that she

could not use learning centers as after-work options, because the students just did not know how to use them properly. She also said that she could not depend on the students to take assignments off the blackboard, because they were not able to keep the information straight. In the same school, another teacher, classified as one of the more effective managers, working with similar students, successfully used learning centers. Her students were eventually able not only to use information off the board but to function independently in many other ways. However, this second teacher was one who was very specific about desired behaviors, and who carefully instructed her students in many aspects of good behavior and in "going to school" skills. She recognized that her students were "disadvantaged" in some ways, but she compensated for that by teaching them the skills that they did not have upon entering school. Her attention to details continued throughout the year, and even in May she was frequently reminding (not nagging) the students how to behave. Her students maintained high levels of on-task behavior and had higher achievement, relative to the students in the other room.

Perhaps this focus on instruction in how to behave serves a dual purpose: It does teach skills where they do not exist, and exerting self-control and maintaining attention to school tasks does require certain skills. However, it may also be communicating to the students that the teacher knows what is going on, and can predict student behavior very well. This could not help but contribute to one's credibility.

Teacher Skills in Diagnosing Students' Focus of Attention

A third category of teacher behaviors that distinguished the two groups of teachers included skills of diagnosing students' needs for information and focus of attention. Here we consider teacher recognition

of student confusion or concerns as well as the monitoring behaviors that provide teachers with information about how smoothly events are going.

The effective managers knew what students were likely to pay attention to, what was likely to be confusing and distracting, and how to focus students on the desired targets of attention. Awareness was demonstrated in the pre-planning of activities, especially at the beginning of school, although it was evident throughout the year. This sensitivity to elements of a situation that are most salient to students was probably part of the ability to analyze the tasks of good behavior and "going to school" skills discussed above; therefore, it is a prerequisite to instructing students in good behavior.

One aspect of this sensitivity, especially at the beginning of the year, was the effective managers' apparent awareness of what we termed "student levels of concern." Upon entering a new situation, concerns at a "personal" level are likely to dictate what one attends to most easily (Hall, 1976). More effective managers started out the school year with activities that provided information about personal needs, such as getting students' names correct, arranging for space for each child and possessions, and explaining very early about basic routines, such as the bathroom, lunch, and getting water. In addition, the teachers immediately began to establish an atmosphere of fairness and of enjoyment. One way of interpreting the teachers' choices of initial topics is that the more effective managers knew that the students were more likely to pay attention to information about these more personal needs. They were of more immediate concern than, say, how to cover one's books or how to use the programmed reading series. By beginning with very practical and personally meaningful matters, the teachers could begin with higher levels of

attention. Once the more personal matters were dealt with, and the teacher had begun to establish her trustworthiness (as someone who knew what was most important to the students), then other, more directly task-related matters were dealt with.

In addition, the better managers were constantly monitoring the class to determine that the students were attending to the tasks set by the teacher, and if not, why not. This is certainly not a surprising finding, as the importance of monitoring has been demonstrated before (e.g., Brophy & Evertson, 1976; Kounin, 1970). Doyle (1979) discusses monitoring as evidence of teachers' sophisticated information processing. He maintains that experienced teachers process much classroom stimuli automatically, without it ever rising to conscious attention. Only when the incoming signals indicate a discrepency in standards for cooperation does the information received through monitoring become conscious and result in teacher reaction.

Doyle's portrayal matches the impressions formed in this study: the more effective manager is an active decision maker who is constantly receiving and processing information about classroom activities and adjusting those activities as necessary. These data suggest that the information that is most salient to the teacher is the students' attention focus.

Examples of activities of the more effective managers that illustrate these points include:

---arranging the desks and chairs so that the students are facing or can easily face the point in the room where they must focus most often.

---using various "tricks" for grabbing students' attention during lessons (moderating voice, movement, and pace).

---scheduling so that the students can, when necessary, "ease into" the morning's work by activities in which it is easy to focus attention and participate right away (especially when children or groups of children have difficulty "settling in" at first).

---very clearly starting and stopping activities, providing warnings before transitions, and using other strategies that help to break ongoing momentum when necessary as well as to restart it (this point was also discussed by Arlin, 1979).

---spacing directions for two similar activities so that they are not confusing, rather than presenting them simultaneously.

---requiring students to keep books closed until the teacher finishes part of an explanation, when looking in the books rather than at the teacher would have led to confusion.

---in general, requiring the active attention of every student when important information is being given.

The more effective managers demonstrated an understanding of what Kounin and associates (Kounin & Doyle, 1975; Kounin & Gump, 1974) called the signal system properties of lessons. Signal systems were provisions within lessons that "oriented, prodded, and supported" students' actions and attention. We saw many examples in which teachers' selections of activities seemed to be determined by an understanding of what students needed in order to attend and stay on-task. For example, one of the more effective managers had a group of boys who were very low achievers in reading and who had great difficulty in keeping themselves on-task. Rather than giving them long independent assignments, as could be done with some others in the class, the teacher arranged their reading activities so that they could easily focus their attention on the content. She met with them

first, keeping up a fairly rapid pace in her reading instruction. Then, she dismissed them to perform an assignment at the listening center, where the voice on the tape offered a salient and continuous source of signals. After they were finished with that and had a short time working at their seats, she met with them again briefly to check their work. Then, they had about 15 minutes to work independently, although the teacher sat so that she could monitor them while she taught another group. After performing their seatwork assignment, they went to a Language Master machine and practiced skills there. The result was that the boys were engaged and attending to instructions or actively practicing skills most of the morning, because the teacher had selected activities and arranged the schedule so that they did not have to depend for long periods of time on their own self-control.

Contrast this to a similar reading group (also an all-boy group) in the same school in a class where the teacher was a much less effective manager. She also saw this group first thing that morning, but the lesson was very slow, and she had to leave the group several times to attend to other students. After the lesson, she gave the boys written assignments to do for the rest of the morning. However, they were observed doing very little work, frequently were up out of their seats, talking and occasionally bothering other students. The observer reported very little time on task for these low achieving boys.

Needless to say, the two classes differed in other ways than the activities given the reading groups. The point here is that the first, more effective teacher's planning and lesson conduct seemed to be based on diagnosis of the boys' attention span and an understanding of the "signal system" inherent in various instructional activites. She kept the boys

"plugged in" to very salient and continuous signals for most of the morning, and spaced out the times when they were to work independently at their seats so that they could do so successfully for brief periods.

Examples are given below of activites of the less effective managers that demonstrate less understanding of students' attention focus and the signals and stimuli inherent in various lessons and activites:

---Calling for transitions suddenly, when some students are still in the middle of a task and have not been warned about the change (also as discussed by Arlin, 1979);

---Giving complex instructions orally without putting them on the board or otherwise helping the students remember;

---Leaving out a new exhibit (such as an animal), delaying an explanation until later, but expecting the students to ignore it for a while;

---Launching into a regular routine immediately after a holiday when the students are wanting to share their news with their friends (which they do for the rest of the morning, to the teacher's dismay);

---Presenting a difficult and frustrating math ditto within the first hour of the first day of school, before the students are familiar with the teacher and the room;

---Failing to provide a clock or reliable information about the time despite frequent student questions about how much longer they have to work;

---relying heavily on long stretches of seatwork for all students with few or no breaks.

The less effective managers seemingly expected the students to exhibit self-control in a situation that offered too many competing stimuli or that

did not offer salient stimuli that prevented boredom and inattention. In contrast, the more effective managers, although they expected the students to exhibit self-control and maintain on-task behavior, knew what signals and what information would be attended to, and they planned activities so that self-control by students was easier.

One pattern that should be examined with these data is whether external controls on attention were removed over the course of the year. That is, in the more effective manager's classes, did the students actually improve their abilities to maintain their attention on-task, or was the engineering of "signal systems" necessary all year?

Discussion

The three clusters of teacher behaviors are obviously closely related to one another--the better managers were performing each set of tasks simultaneously, and the less effective managers had shortcomings in each area. The better managers were providing information to students about how to behave, setting up an environment in which there were reasons to perform on-task behaviors (because of the accountability and apparent purpose), and also engineering the environment by assigning tasks and activities in which it was possible for the students to be accountable and successful. The less successful managers did not consistently hold their students accountable or communicate purposes to them that would encourage on-task behaviors; they were also generally ambiguous about exactly what was expected from the students; and they often put their students into situations when appropriate behavior (attention to task) was difficult to accomplish, either because of a lack of information or because of distracting stimuli.

One theme that ties together these three ways of describing teacher behavior is the apparent teacher focus (or lack of it) on what students understand and what they need to know to accomplish any particular behavior. Therefore, the classes can be analyzed in terms of the information flow from the teacher to the students (both directly and in terms of the materials and activities provided by the teacher), and from the students to the teacher (who adjusts, or fails to adjust, according to the success of the students at attending to the desired focus). From this point of view, classroom management may be considered to be primarily the provision of information (both initially and as feedback) about on-task performance, and the provision of activities that facilitate on-task behavior. As such, it is analogous to the other set of responsibilities that are more traditionally termed "instructional," in which teachers also provide information about the content to be learned, and then create tasks for the students to apply their knowledge of the content.

This description of management as the establishment and maintenance of information flow is most easily applied to the beginning-of-the-year activities, but it is not limited to that time. However, events that occur during the rest of the year can only be interpreted in the context of the initial information provided by the teacher about "the way things work" in the classroom. A teacher may provide a great deal of information in a very brief corrective statement, if it has been preceded by careful specification of the difference between appropriate and inappropriate behavior in those circumstances, and also by consistent enforcement that has communicated that the teacher will follow through on the correction.

Obviously, there are other ways of examining management tasks of teachers, and other elements are necessary for overall managerial

effectiveness than the provision of clear information about how and why on-task behavior will be accomplished. As Kounin (1970), Brophy and Evertson (1976), and others have pointed out, adequate instructional programs are also necessary. If the tasks given students do not have the appropriate balance of challenge and success, then the students are not likely to either stay on-task or to be learning efficiently. Also, certain personal characteristics of the teacher are important. Although many different "styles" may be observed among effective teachers, certain basic requirements seem to be an underlying ego strength and comfort in interpersonal situations (Brophy & Putnam, 1979).

Other aspects of classroom life that affect the success of management strategies include the background and culture of the students and the influences of the peer group on its members. Although we have not systematically documented it, we suspect that the more effective teachers in the sample had knowledge of the social characteristics of their groups, and this figured heavily into their diagnosis and understandings of students' likely targets of attention and concerns. However, we have less information on the "peer cultures" of the classrooms than we do on the more clearly managerial behaviors of the teacher.

This paper has presented several hypotheses that may be supported by a more systematic analyses of the narrative descriptions. We have assumed that student understanding of teacher communications and teacher diagnosis of that student understanding are important constructs that will help us describe the differences between more and less effective managers.

At present, the narrative case studies of the most and least effective managers are being examined and examples of these three clusters of teacher behaviors are being highlighted. Hopefully, the final outcome will be a

collection of case studies analyzed in terms of the likely information conveyed by the teachers to the students and the students' responses.

If these dimensions or constructs prove to be useful in that respect, there are several ways in which further research could verify the assumptions underlying them. A descriptive study of students' perceptions and interpretations of teachers' behaviors within various contexts would help to link student and teacher behavior. At present, there are research studies of student perceptions of the achievement hierarchy within the classroom and of student interpretations of certain teacher behaviors with regard to high and low achievers (Weinstein & Middlestadt, in press, Note 7). However, there has been little research on what teacher managerial behaviors mean to students, and how that meaning influences student behaviors. It would be valuable to know what aspects of teacher behaviors are most salient to students, and how individual differences among students affect their perceptions.

Likewise, further work on teachers' use of cues from students would be informative. Research done on teachers' decision making and information processing clearly indicates that teachers do rely on cues from students to adjust activities (Doyle, 1979; Peterson & Clark, 1978; Cone, Note 8; MacKay & Marland, Note 9). There should be continued work along these lines to ascertain what dimensions of student behavior are most salient to teachers who are better classroom managers and monitors.

If the ideas described in this paper are supported by a more extensive examination of the data, they may be useful even before research on the underlying assumptions is done. Their greatest value will lie in their usefulness to teachers as concepts with which to examine their own behavior. An experimental program could be developed around these

constructs and others suggested by research to determine if focusing on these aspects of teaching leads to improved management. For example, what would be the effects of asking teachers to reflect systematically on the meaning of their behaviors to students, especially if they are given objective feedback about their own behaviors? Other experimental studies in which teachers were provided with general concepts as well as some specific suggestions have led to changes in teacher behaviors (in the desired directions) as well as improved student outcomes (e.g., Anderson, Evertson, & Brophy, 1979; Good & Grouws, in press). The ideas presented here, illustrated with both positive and negative examples from the actual case studies, could form the basis of a similar experimental study.

Reference Notes

1. Evertson, C., & Anderson, L. The classroom organization study: Interim progress report (R&D Report No. 6002). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1978.

2. Fisher, C., Filby, N., Marliave, R., Cahen, L., Dishaw, M., Moore, J., & Berliner, D. Teacher behaviors, academic learning time and student achievement: Final report of Phase III-B, beginning teacher evaluation study. San Francisco: Far West Laboratory of Educational Research and Development, June, 1978.

3. McDonald, R., & Elias, P. The effects of teaching performance on pupil learning, beginning teacher evaluation study: Phase II, Final report (Vol. I). Princeton, N.J.: Educational Testing Service, 1976.

4. Stallings, J., & Kaskowitz, D. Follow through classroom observation evaluation, 1972-1973. Menlo Park, Calif.: Stanford Research Institute, 1974.

5. Anderson, L., & Evertson, E. Classroom organization at the beginning of school: Two case studies (R&D Report No. 6003). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1978.

6. Emmer, E., Evertson, E., & Anderson, L. The first three weeks . . . and the rest of the year (R&D Report No. 6005). Austin: The University of Texas at Austin, Research and Development Center for Teacher Education, 1979.

7. Weinstein, R., & Middlestadt, S. Learning about the achievement hierarchy of the classroom: Through children's eyes. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, April, 1979.

8. Cone, R. Teachers' decisions in managing student behavior: A laboratory simulation of interactive decision-making by teachers. Paper presented at the annual meeting of the American Educational Research Association, Toronto, March, 1978.

9. MacKay, D., & Marland, P. Thought processes of teachers. Paper presented at the annual meeting of the American Educational Research Association, Toronto, March, 1978.

References

Arlin, M. Teacher transitions can disrupt time flow in classrooms. American Educational Research Journal, 1979, 16(1), 42-56.

Anderson, L., Evertson, C., & Brophy, J. An experiemental study of effective teaching in first-grade reading groups. Elementary School Journal, 1979, 79, 193-223.

Brophy, J., & Evertson, C. Learning from teaching: A developmental perspective. Boston, Mass.: Allyn and Bacon, Inc., 1976.

Brophy, J., & Putnam, J. Classroom management in the elementary grades: A literature review. In D. Duke (Ed.), Classroom management, seventy-eighth yearbook of the national society for the study of education. Chicago, Illinois: University of Chicago Press, 1979.

Doyle, W. Making managerial decisions in classrooms. In D. Duke (Ed.), Classroom management, seventy-eighth yearbook of the national society for the study of education. Chicago, Illinois: University of Chicago Press, 1979.

Evertson, C., & Anderson, L. Beginning school. Educational Horizons, in press.

Good, T., & Grouws, D. The Missouri mathematics effectiveness project: An experimental study in fourth-grade classrooms. Journal of Education Psychology, in press.

Hall, G. The study of individual teacher and professor concerns about innovations. Journal of Teacher Education, 1976, 27, 22-23.

Kounin, J. Discipline and group management in classrooms. New York: Holt, Rinehart, and Winston, 1970.

Kounin, J., & Doyle, P. Degree of continuity of a lesson's signal system and the task involvement of children. Journal of Educational Psychology, 1975, 67, 159-164.

Kounin, J., & Gump, P. Signal systems of lesson settings and the task-related behavior of preschool children. Journal of Educational Psychology, 1974, 66, 554-562.

Peterson, P., & Clark, C. Teachers' reports of their cognitive processes during teaching. American Educational Research Journal, 1978, 15, 555-566.

Rosenshine, B., & Berliner, D. Academic engaged time. British Journal of Teacher Education, 1978, 4, 3-16.

Weinstein, R., & Middlestadt, S. Student perceptions of teacher interactions with male high and low achievers. Journal of Educational Psychology, in press.

Wiley, D., & Harnischfeger, A. Explosion of a myth: Quantity of schooling and exposure to instruction, major educational vehicles. Educational Researcher, 1974, 3, 7-12.